

What is claimed is:

1. A system for load balancing, the system comprising:
 - a LAC, the LAC including a contact LNS address, the contact LNS address specifying the address of a contact LNS;
 - 5 a contact LNS communicatively coupled to the LAC;
 - a plurality of load balancing LNSs communicatively coupled to the contact LNS and to the LAC; and
 - wherein the LAC sends a message to the contact LNS, the message informing the LNS of its availability and the contact LNS sends a response message containing
 - 10 IP address of a selected one of the plurality of load balancing LNSs to which the LAC should establish a session.
2. The system of claim 1 wherein the contact LNS is included within a virtual LNS.
- 15 3. The system of claim 1 wherein the message informing the LNS of the availability of the LAC is an ICRQ message.
4. The system of claim 1 wherein the response message is a ICRP message.
- 20 5. The system of claim 1 further including a CPE coupled to the LAC.
6. A method of load balancing, the method comprising:

obtaining the address of a contact LNS;
receiving from the contact LNS the address of the next available LNS;
establishing a connection with the next available LNS; and
receiving data and forwarding the data to the next available LNS.

5

7. The method of claim 7 wherein the step of obtaining an address includes sending an ICRQ message.

8. The method of claim 7 wherein the address of the next available LNS is included in an ICRP message.

9. The method of claim 7 wherein the contact LNS is included in virtual LNS.

10. A method for load balancing between a contact LNS, a LAC, and a next LNS, the method comprising:

determining whether the contact LNS can provide a session;

sending a message to the LAC indicating whether the LNS can provide the session;

obtaining the next LNS address and providing the next LNS address to the LAC; and

establishing a connection between the next LNS and the LAC using the next LNS address.

11. The method of claim 10 wherein the contact LNS is included in a virtual LNS.

5 12. The method of claim 11 including the further step of determining the identity of the contact LNS within the virtual LNS.

10 13. A system for load balancing, the system comprising:
a CPE;
a LAC, the LAC coupled to the CPE;
a first network, the first network coupled to the LAC;
a second network coupled to the first network;
a contact LNS coupled to the first network;
a next LNS coupled to the second network, the next LNS having an IP
15 address; and

wherein the LAC sends a message to the contact LNS via the first network, the message informing the LNS of its availability and the contact LNS sends a response message to the LAC, the message containing the IP address of the next LNS, the LAC establishing a connection with the next LNS via the second network.

20

14. The system of claim 13 wherein the contact LNS includes a table and the address of the next LNS is stored in the table.

15. The system of claim 13 wherein the contact LNS is included in a virtual LNS.

16. A system for load balancing, the system comprising:

5 means for obtaining the address of a contact LNS;

means for receiving from the contact LNS the address of the next available LNS;

means for establishing a connection with the next available LNS; and

means for receiving data and forwarding the data to the next available LNS.

10

17. A computer readable medium having stored therein instructions for causing a processing unit to execute the following method:

obtaining the address of a contact LNS;

receiving from the contact LNS the address of the next available LNS;

15 establishing a connection with the next available LNS; and

receiving data and forwarding the data to the next available LNS.

18. A computer program for load balancing, the computer program comprising:

20 first code for obtaining the address of a contact LNS;

second code for receiving from the contact LNS the address of the next available LNS;

third code for establishing a connection with the next available LNS; and

fourth code for receiving data and forwarding the data to the next available
LNS.

5